

I'm not a bot



























Digital credentials are a secure way to verify a person's identity in a computer system. Digital badges, digital certificates and other online credentials allow users to authenticate themselves without needing to carry paper credentials, such as a driver's license or employee badge. Digital credentials can also verify a person's specific skills and accomplishments, such as completing a course or degree program. They are used by a variety of organizations, including businesses, nonprofits, educational institutions and training providers. In cybersecurity, digital credentials can help reduce the risk of identity-based cyberattacks. Threat actors today often find it easier to hijack valid accounts than to hack into a system. The IBM® X-Force® Threat Intelligence Index found that the misuse of valid accounts is cybercriminals' most common entry point into victim environments, accounting for 30% of all incidents. Digital credentials can take the place of passwords and other authentication factors that hackers can easily crack. To take over an account, the attacker would need to steal the digital credential—which is much harder to do than brute-forcing a password. Digital credentials are also difficult to counterfeit, as they are often protected by measures such as encryption or blockchain-based verification. Digital credentials are often designed, created, delivered, managed and revoked by a central authority, such as a university or employer, and are typically used to prove identity and access to a system or service. Digital credentials are available in multiple forms, specialized for different environments and functions. Common types include: Digital badges/Microcredentials/Open Badges/Digital certificates/Blockchain credentials/Verifiable digital credentials/Digital badges are often used as proof of a credential earned, such as completing a course of study. They can also be used as proof of identity or attendance at events and conferences. Digital badges usually take the form of a digital image or icon containing metadata such as the issuer's name, recipient's information, badge details and verification methods. Badges are often authenticated using cryptographic signatures. Microcredentials are a type of digital badge used to verify smaller-scale accomplishments, such as completion of a webinar or individual modules in online courses. Microcredentials enable learners to focus on the specific modules of a larger course with the most valuable professional development or learning outcomes. Open Badges are digital badges that adhere to the Open Badges standard originally developed by the Mozilla Foundation. The standard supports badge interoperability across an ecosystem of websites and applications, including social media platforms such as LinkedIn and integrations with email signatures. The standard specifies a common metadata format and methods for sharing that metadata, such as by embedding it within an image. It also includes a mechanism for validating badges through cryptographic signatures. The term "digital certificate" can refer to two distinct kinds of credentials: those that verify a person's accomplishments and those that authenticate users and devices. Accomplishment-based digital certificates generally signify the same kinds of competencies as paper certificates, such as diplomas. One of the key differences between digital badges and certificates is that certificates usually involve more effort, such as completing a degree program at an educational institution, finishing a professional certification program or earning membership in a professional organization. This more involved process has the potential to encourage more sign-ups, as customers are generally more willing to register with an organization that has a higher barrier to doing so. The organizations and educational institutions that use digital credentials can choose to create a digital credential that is difficult to verify, such as a diploma. Digital credentials, however, can be independently authenticated—especially if they use decentralized methods such as a blockchain. They can remain usable and reliable long after issuing institutions have shut down. Digital transformation is a business strategy initiative that incorporates digital technology across all areas of an organization. It evaluates and modernizes an organization's processes, products, operations and technology stack to enable continual, rapid, customer-driven innovation. Today customers expect to be able to conduct their business, do their work and live their lives by using the latest technology advances. They expect this ability from wherever they are, anytime they want, by using the device of their choice and with all the supporting information and personalized content they need close at hand. The ultimate goal of digital transformation is to meet these expectations. Every organization's digital transformation implementation is different. It can begin with a single focused technology project, or as a comprehensive enterprise-wide initiative. It can range from integrating digital technology and digital solutions into existing processes and products, to reinventing processes and products or creating entirely new revenue streams by using still-emerging technologies. But experts agree that digital transformation is as much about business transformation and change management as it is about replacing analog processes or modernizing existing IT. While often led by a company's chief information officer (CIO), it requires the entire C-suite to align on new technologies and data-driven methodologies that can improve customer experience, empower employees and achieve business goals. Digital transformation can be a disruptive force, as it can disrupt a market, industry or even a business model, or have a need to respond to a disruptive competitor. While business model transformation grabs the headlines, business process optimization is an increasingly common digital transformation driver. Process optimization is the use of digital technology to improve business processes, such as automating repetitive tasks, reducing manual data entry and streamlining workflows. Digital transformation can also make it easier to manage transactions and, sometimes, disrupt entire industries. The COVID-19 pandemic drove transformational innovations to better support remote and hybrid work. Today, organizations are applying artificial intelligence (AI), automation and other technologies to streamline workflows, personalize customer experiences, improve decision-making, and respond more quickly and effectively to market disruptions and new opportunities. Digital transformation can help companies increase customer loyalty, attract talented employees, foster competitive advantage and build business value. McKinsey research found that between 2018-2022, digital leaders achieved about 65% greater annual total shareholder returns than digital "laggards." Discover expertly curated insights and news on AI, cloud and more in the weekly Think Newsletter. In digital transformation, domains are essentially targets or levers for transformation. Most digital transformation strategies target one or more of these domains: Business and operating models/Processes/Products/Digital employee experience/Customer experience Business model transformation is a fundamental change in the way that an organization delivers products, services and value to its customers, investors or stakeholders. Examples include: Delivering value through digital streaming, instead of physical discs (Netflix, Hulu) Enabling anyone with a car to make money without purchasing a medallion (Uber, Lyft) Allowing customers to deposit checks without visiting the bank (mobile deposits) Organizations pursue business model transformation for any number of reasons—for example, to meet changing customer expectations, boost flagging sales, or differentiate themselves in a highly competitive market. They might also see a chance to disrupt a market, industry or even a business model, or have a need to respond to a disruptive competitor. While business model transformation grabs the headlines, business process optimization is an increasingly common digital transformation driver. Process optimization is the use of digital technology to improve business processes, such as automating repetitive tasks, reducing manual data entry and streamlining workflows. 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with AI-powered cybersecurity solutions. Explore AI cybersecurity Whether you need data security, end-point management and access management (IAM) solutions, our experts are ready to work with you to achieve a strong security posture. Transform your business and manage risk with a global security leader in cybersecurity consulting, cloud and managed security services. Explore cybersecurity solutions Discover cybersecurity services Digital transformation in banking is the act of integrating digital technologies and strategies to optimize operations and enhance personalized experiences. Across the financial services industry, this process can occur by breaking down data silos and reimagining the customer experience. The world is rapidly changing to be more digitally focused, especially in the banking industry. Traditional banks are undergoing major digital transformations in order to meet the needs of new customers and existing customers seeking a more tailored and individualized banking experience through digital channels. To make it possible, banks and financial institutions must take on a digital transformation strategy that puts customer experience first by analyzing, interacting and understanding customer needs. Get weekly insights, research and expert views on AI, security, cloud and more in the Think Newsletter. Digital transformation isn't new to the banking sector, but it has become more relevant as fintech and new operating models have gained in popularity. Traditional banks must keep up with the changing market and ever-evolving customer needs, such as the drive toward using mobile apps or websites to perform transactions. These types of technology are part of the omnichannel strategy banks are using to break down data silos and reimagine the customer journey. With the more recent shift toward automation, banks and financial service providers need to modernize their banking strategies. The growing demand for artificial intelligence (AI), Internet of Things (IoT), and blockchain are among the other technologies banks must consider when creating a digital transformation strategy. Customers are seeking digital approaches to managing their accounts, prioritizing personalized product experiences, transparency and security—all in real-time. Mobile devices drive this digital transformation trend, along with customers increasing need to stay constantly connected. The only way to meet the customer needs is through a digital transformation journey. This journey harnesses customer data to analyze behavior patterns, enabling businesses to align more relevant products and services with their customers' needs. Customer journey: Considering the more customer-centric approach and by using data and other new technologies to tailor banking services to the individual customer. Modernized infrastructure: New technologies, such as automation and AI can streamline internal operations and ultimately boost efficiency and give these banks and financial service providers the competitive advantage. Data analytics: By using advanced data analytics tools, banks can have more informed and strategic decision-making. Breaking down these data silos provides more opportunity for better risk management and innovation. Security measures: A part of digital banking transformation is adopting new and advanced cybersecurity measures that better protect sensitive customer data. Online banking and digital services bring about a new layer of security concerns. With advanced technology in place, banks can bring in fraud detection measures and ensure that regulatory compliance is met. Digitization: The digital era is upon us and it's on the financial sector to align with these other sectors taking the digital-forward approach. For these reasons digital transformation initiatives are so important, such as partnering with fintech startups or open banking frameworks that aim to expand services for stakeholders. For a successful digital transformation to take place banks must take advantage of the latest digital technology available. Here are some of the most common existing technologies within the banking and financial services sector. Application programming interfaces (APIs): An API is a software interface that allows for two or more software applications to integrate data services and capabilities, instead of having to develop them from scratch. Which allows for better connectivity for businesses to their new customers and partners? Furthermore, they can create new products and services for their customers and improve overall operational efficiency. Cloud computing: Cloud computing technology is the on-demand access of computing resources, which banks and financial service providers have come to use and accept. The cloud environment allows for better operations and a more flexible infrastructure that's agile and scalable. AI and machine learning (ML): The AI and ML technologies are being used for several transformation efforts, including analyzing significant datasets, automating certain processes and improving the user experience through personalized services. AI in particular is used in banking through online assistants and chatbots that can address basic customer issues. Separately, an advantage of using ML in banking is that it makes it easier to track changes in user behavior and detect fraudulent activity faster. Internet of Things, (IoT): IoT refers to a network of physical devices, think wearable smartwatches or smart thermostats that are embedded with sensors and software that allows them to collect and share data. For banks, this smart connectivity has allowed customers to make instant contactless payments and interact with their accounts in a mobile banking capacity. The IoT can also be thanked for bringing risk management and advancements in the authorization process more than ever. Blockchain: The transparent and information-driven nature of blockchain makes it a trending technology for banks and financial service providers. It has resulted in more secure data transactions and an enhanced interface that meets and goes beyond customer expectations. Today, customers trust blockchain solutions and find it to be a more transparent way of operating business models. The changing market and push toward new technology make it imperative to evolve. While the digital transformation process can be intimidating, with the right resources and assistance, banks can see the tremendous benefits from the transformation journey. As your bank or financial service provider begins the transformation process, here are some basic steps to follow: Establish business objectives Have goals in mind before setting out on a transformation journey. It's important for the transformation team to lay out their business and technical objectives and understand what they want to gain from the transition. Action item: Create a list of priority objectives to start and then tailor that list as the bank or financial institution leaders see fit. Evaluate your current technology Take stock of all the current systems and products that your bank is using. Once the list of all current systems has been made, evaluate them based on how each is working or not working toward your business goals. It's important to be transparent about your bank's process and be open to modifying it to fit the digital landscape. Action item: Be clear about your processes. List out which processes are necessary for your transformation, while also considering constraints including cost and timeline. Align scope and customer needs To understand what your clients need next, take back a step and evaluate how you're taking stock of current clients. Use data analysis to understand how you are segmenting and collecting data on clients. Use the data to understand which products are selling and which digital services are most popular to the clients. Action item: Make a plan so that you are targeting consumers more likely to use digital services. Ensure that your data is working for your business needs. Marketing teams can have a much more targeted approach once these consumers are identified and understood. Assess priorities Be realistic about your resources and what your organization can handle, in terms of both monetary and human resources. Define your target architecture and early proofs of value to measure achievements toward your business goals. Action item: Write out your objectives; list out ways in which you can enable your institution to make incremental changes at first. Early wins, even small ones, help with transformation buy-in and momentum. Present business case Once all transformation preparation has been made, present the business case for core systems transformation to key stakeholders. The business case must be delivered to the C-suite and board of directors, if relevant, for sign-off. Once you have signed off, proceed with operationalizing the roadmap and strategy for a full transformation. Action item: Prepare your presentation for key stakeholders. Be prepared to defend the transformation needs you have found and laid out. Digitization in the banking system is complex and goes much further beyond just moving a traditional bank to an online banking system. The transformation process can bring about new opportunities for businesses of all sizes and bring forth banking solutions that provide greater customer satisfaction. Here are some of the greatest benefits from digital transformation in banking and financial services. More customer-focused investment banking: Digital transformation in investment banking is more customer-focused than ever before. Because digital transformation in investment banking has replaced investment banks with small investors, the focus is now on short-term goals and all on one-digital platform. Offerings and technological decisions are now based on customer profiles.Easier compliance: By making the switch to a modern financial management system, banks and financial service providers can stay compliant. There are automated processes that can help employees allocate less time doing tasks like auditing reports and instead focus on the work that matters most. If a bank is on a cloud-based system, it provides timely updates and keeps up to date on regulations automatically.Access new clients: A digital-native environment makes attracting customers easier by being upfront about their services and what they can provide. By going digital, banks are making customer acquisition much easier with expanded services and 24x7 account access.Enhanced security: With the growth of digitization, comes the challenge of data security and businesses securely managing customer data. Thankfully, there are sophisticated software development services available to protect your customers personal information and save their accounts from being hacked or scammed.More personalized banking: A digital transformation helps banks and financial institutions to hone in on exactly what a customer needs and wants. There is no longer the need to assume what a customer wants, with new technology, a bank can know exactly what it is the customer expects of them. Banking is no longer just a weekly practice, it's a daily act that requires a fast and secure ecosystem that customers can trust.